UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,205	12/06/2000	Tracy E. Thieret	XER 2 0344 D/A0508	8635

7590   07/13/2005

Albert P. Sharpe lll
Fay, Sharpe, Fagan, Minnich & McKee, LLP
7th Floor
1100 Superior Avenue
Cleveland, OH   44114

EXAMINER
PHAM, THIERRY L

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/731,205	THIERET ET AL.
	Examiner	Art Unit	
	Thierry L. Pham	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *19 May 2005*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-23* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

● This action is responsive to the following communication: an Amendment filed on 5/19/05.

● Claims 1-23 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-12, 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorkin et al

(U.S. 5898823), and in view of Irie et al (U.S. 6606164).

Regarding claim 1, Sorkin discloses network document system *(document network*

system 70, fig. 8) including: .

● a document processing device *(network printer 76, fig. 8)*;

● a document processing device controller *(network print server 74, fig. 8)*; and

● a network interface controller *(client computer 72, fig. 8)* for communicating job data and

control data *(job data and control data such as monitoring status of printer, fig. 8, abstract,*

col. 2, lines 35-42 and col. 4, lines 5-12) to and from a network *(network 10, fig. 1)*, wherein the

interface controller is disposed, intermediate the document processing device controller and the

network *(client computer 72 is disposed between network 10 and print server 74, fig. 8)*, and in

parallel communication with the document processing device and document processing device

controller *(and parallel communicating with network printer 76, bypass print server 74, fig. 2*

and fig. 8), for segregating the job data and the control data *(separate print data and control*

data, fig. 8, e.g., subsequent communication such as printer monitoring/set-up is

communicated directly with printer and job data is communicated via a print server 74,

abstract and col. 1, lines 40-45 and to access the printer directly for special functions

including printer's monitoring and/or setup when desired, col. 5, lines 58-59), and wherein the

segregated control data is directly communicated between the network interface controller and

the document processing device *(subsequent communication including printer status is communicated directly with printer and job data is communicated via a print server bypassing print server 74, col. 4, lines 5-12 and independently from the job data after the printer and client have established its communication)* which document processing controller *(printer server 74 is disposed between client computer 72 and network printer 76, fig. 8)* is disposed between the network interface controller and the document processing device.

Sorkin discloses a print server 74 *(document processing device controller)* as shown in fig. 8, but fails to teach such print server 74 is for translating the job data communicated from the network interface controller to the document processing device independently from the control data, into data format executable by the document processing device.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for translating the job data communicated from the network interface controller to the document processing device independently from the control data, into data format executable by the document processing device *(print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52, and it is known in the art that control data and job data are entirely independent from each other)*.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (●) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.

Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 1.

Regarding claims 2-3, Sorkin further discloses the system as claimed in claim 1 wherein the control data includes any of: diagnostic data, operating software, remote operating instructions (printer's configuration, set-up, printer's status and etc, abstract and col. 4, lines 5-12), performance reports, specification of system states and the associated actions, or requests for information from system elements.

Regarding claims 4-5, Sorkin further discloses the system as claimed in claim 1 wherein the interface controller identifies object-oriented rendering data within the job data (if the job requires spooling, then the print job is transmitted to the print server 74, and if the not does not require any printing and/or performing any rendering such as color conversion, then the requests is directly communicated with the network printer 76), and parallelly communicates the object-oriented rendering data to the document processing device controller and the document processing device.

Regarding claim 6, Sorkin further discloses the system as claimed in claim 1 wherein the interface controller comprises either a physical (i.e. client computer 72, fig. 8) or logical entity in the system.

Regarding claim 7, Sorkin discloses a business to business communication system *(system, fig. 8)* for controlling and monitoring a document processing device through network communications, comprising:

- a document processing device *(network printer 76, fig. 8)* responsive to remote communication signals and capable of issuing device operating status signals *(abstract and col. 4, lines 5-12),* the communication signals and status signals being received and sent, respectively, via a network system;

- a network interface controller *(client computer 72, fig. 8)* interposed between the document processing device and the network system for distinguishing the remote communication signals as job data or control data;

- a document processing device controller *(network print server 74, fig. 8),* disposed intermediate the network interface controller and the document processing device, and;

- wherein the control data *(i.e. subsequent communication including printer status is communicated directly with printer and job data is communicated via a print server 74, fig. 8)* is communicated to the document processing device directly from the network interface controller and independently from the job data *(i.e. subsequent communication including printer's monitoring is communicated directly with printer and job data is communicated via a*

print server, fig. 8 independently from the job data after the printer and client have established its communication)

Sorkin discloses a print server 74 *(document processing device controller)* as shown in fig. 8, but fails to teach such print server 74 is for translating the job data communicated from the network interface controller to the document processing device independently from the control data, into data format executable by the document processing device.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for translating the job data communicated from the network interface controller to the document processing device independently from the control data, into data format executable by the document processing device *(print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52).*

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (●) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.

Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 7.

Regarding claims 8-12, Sorkin further discloses the system as defined in claim 7 wherein the control data includes the device operating status signals (i.e. job event status, fig. 8, abstract and col. 4, lines 5-12) communicated as a regular operational report or in response to an inquiry received by the network interface controller from the network system and many other operating statuses.

Regarding claims 16-18, Sorkins further discloses wherein the control data comprises object-oriented rendering data including text, pictures, graphics for enhancing, and PDL (if the job requires spooling, then the print job is transmitted to the print server 74, and if the not does not require any printing and/or performing any rendering such as color conversion, then the requests is directly communicated with the network printer 76 and it is also known in the art print server 74 also processes rendering intents, please also see Irie for more details regarding

print server 120 for converting print data to PDL and performs other type of rendering intents, i.e. color conversion, halftoning and etc).

Regarding claims 19, Sorkin discloses a network document processing system (document system, fig. 8) wherein job data for processing a document is communicated from a job source to a printer through a network, comprising:

• a digital front end *(DFE, network print server 74, fig. 8)* disposed in communication with the printer for receiving; and

• an intelligent interface network controller *(iNIC, client computer 72, fig. 8)* disposed intermediate the network and the DFE, and in parallel communication with the printer and the DFE, for selectively communicating the job data and control data independently from one another to or from the printer *(i.e. subsequent communication including printer's monitoring is communicated directly with printer and job data is communicated via a print server 74 independently from one another after the client and printer has established its communication, col. 4, lines 5-12),* which control data may bypasses flow path communication through the DFE during printer communication with the network.

Sorkin discloses a print server 74 (document processing device controller) as shown in fig. 8, but fails to teach such print server 74 is for translating the job data imaging signals recognizable by the printer.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for translating the job data imaging signals recognizable by the printer (print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (•) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.

Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 19.

Regarding claim 20, Sorkin further discloses the document processing system as claimed in claim 19 wherein the job data and the control data enable printer value-added services and management functions (management and monitoring, col. 4, lines 5-12).

Regarding claim 21, Sorkin further teaches the document processing system as defined in claim 14 wherein the printer value-added services and management functions include at least one of: remote diagnostics, remote device management, image processing, process control, software update, consumable supplies status and ordering, and variable data job integrity (i.e. job event status, fig. 8, abstract and col. 4, lines 5-12). ·

Regarding claim 22, Sorkin discloses a method of operating a network-based assembly for document processing *(document system, fig. 8)* wherein the assembly includes an interface controller (client computer, fig. 8) connected between a document processing device *(network printer, fig. 8)* and a network system *(network 10, fig. 8)*, and a digital front end (DFE) connected (print server, fig. 8) between the interface controller and for the document processing device, the method comprising steps of:
- communicating job data and control data to the assembly through the network system *(job data and control data such as monitoring status of printer, fig. 8, abstract, col. 2, lines 35-42 and col. 4, lines 5-12)*;
- determining the appropriate flow of the job data and the control data to the assembly through the interface controller *(job data and control data such as monitoring status of printer, fig. 8, abstract, col. 2, lines 35-42 and col. 4, lines 5-12)*;
- segregating, at the interface controller, the control data from the job data *(separate print data and control data, i.e., subsequent communication including printer's monitoring and print job data, fig. 8, job event is communicated directly with printer and job data is communicated via a print server 74)*;
- communicating the control data directly *(i.e. subsequent communication including printer's monitoring is communicated directly with printer and job data is communicated via a print server, col. 4, lines 5-12)* to the document processing device and the job data at least to the DFE;

- directing the document processing signals to the document processing device *(i.e. job event data is directly communicated between the client computer 72 and network printer 76 bypassing print server 74, col. 4, lines 5-12)*; and,

- executing the document processing signals at the document processing device *(print document data via network printer, fig. 8)*, whereby the control data is communicated to and from the document processing device exclusive of a flow path through the DFE.

Sorkin discloses a print server 74 (document processing device controller) as shown in fig. 8, but fails to teach such print server 74 is for converting the job data at the DFE to document processing signals recognizable by the document processing device.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for is for converting the job data at the DFE to document processing signals recognizable by the document processing device (print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (●) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.

Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 22.

Regarding claim 23, Sorkin further discloses the method as claimed in claim 22 wherein the executing comprises processing the document in a xerographic environment (network printing environment, fig. 8).

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorkin and Irie as described in claims 1 & 8 above, and further in view of Suzuki et al (U.S. 5270775).

Regarding claims 13-15, the combinations of Sorkin and Irie do not disclose wherein the control data (command) comprising billing information, accounting information, and service information.

Suzuki, in the same field of endeavor for printings, teaches the control data (command) comprising billing information, accounting information, and service information (col. 1, lines 50-67 and col. 2, lines 1-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin and Irie as per teachings of Suzuki because of a following reason: (1) to allow operators/businesses to obtain usage data of plurality of printers connected via a network for proper billing, accounting, and service information.

Therefore, it would have been obvious to combine Aikawa with Suzuki to obtain the invention as specified in claims 13-15.

Response to Arguments

Applicant's arguments, see pages 7-11, filed 5/19/05, with respect to the rejection(s)of claim(s) 1, 7, 19, and 22 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of different interpretations of previous applied arts due to added limitations.

• Regarding claims 1-6, the applicants argued the cited prior arts of record (US 5898823 and US 6606164) fail to teach and/or suggest separating the control data from the print data, and using two separate processing devices; one for translating the print job data into printing signals and another for segregating print jobs from "other" requests coming to the printer and routing the segregated "other" requests directly to the printer.

In response, the examiner first reminds the applicants that amended claim 1 changes the scope of the invention by adding the new limitations "independently from the control data". Herein, the examiner has introduced a new ground of rejection in view of different interpretation of previous applied arts (US 5898823 and US 6606164). Please note the difference between "event message" from previous office action and "subsequent communication including printer set-up" of current office action as taught by US 5898823. Subsequent communication including printer set-up takes place after the printer and the client have established its communication, and independently from the print job data.

In addition, claim 1 is rejected in combinations of US 5898823 (Sorkin) and US 6606164 (Erie). Sorkin teaches a device for segregating a control signals from a print job data (*client computer 72 for separating print data and control data, fig. 8, e.g., subsequent communication such as printer monitoring/set-up is communicated directly with printer and job data is communicated via a print server 74, abstract and col. 1, lines 40-45 and to access the printer directly for special functions including printer's monitoring and/or setup when desired, col. 5, lines 58-59*) and Erie teaches a print server 74 for translating the job data communicated from the network interface controller to the document processing device independently from the control data, into data format executable by the document processing device. Please refer to rejection as discussed above for more details.

- Regarding claims 7-18, the applicants argued subject matter as equivalent to claims 1-7;⁶ therefore, please refer to examiner's responses as discussed above for details.

- Regarding claims 19-23, the applicants argued subject matter as equivalent to claims 1-7;⁶ therefore, please refer to examiner's responses as discussed above for details.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
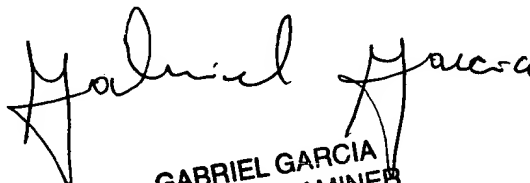
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

GABRIEL GARCIA
PRIMARY EXAMINER